This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
 - TEXT CUT OFF AT TOP, BOTTOM OR SIDES
 - FADED TEXT
 - ILLEGIBLE TEXT
 - SKEWED/SLANTED IMAGES
 - COLORED PHOTOS
 - BLACK OR VERY BLACK AND WHITE DARK PHOTOS
 - GRAY SCALE DOCUMENTS

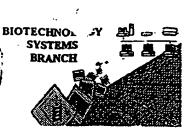
IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

COPY

RAW SEQUENCE LISTING ERROR REPORT





The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source

Date Processed by STIC:

10 774, 147 1700

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221 Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskelle or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- I. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EPS Submission User Manual cPAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry directly to (EFFECTIVE 12/01/03):
 U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two. 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or-other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1803-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



DATE: 02/18/2004

TIME: 15:00:45

IFWO

```
Input Set : A:\10050-03USA.ST25.txt
                    Output Set: N:\CRF4\02182004\J774147.raw
     3 <110> APPLICANT: POSTECH Foundation
            POSCO
     5
             RYU, Sung-Ho
     6
             BAE, Yoe-Sik
     7
             PARK, Eun-Young
     8 .
             SUH, Pann-Ghill
    10 <120> TITLE OF INVENTION: LEUKOCYTE STIMULATING PEPTIDES
    12 <130> FILE REFERENCE: 10050-03USA
 -> 14 <140> CURRENT APPLICATION NUMBER: US/10/774,147
:--> 14 <141> CURRENT FILING DATE: 2004-02-06
    14 <150> PRIOR APPLICATION NUMBER: US 60/445,621
    15 <151> PRIOR FILING DATE: 2003-02-07
    17 <160> NUMBER OF SEQ ID NOS: 36
                                                           Does Not Comply
    19 <170> SOFTWARE: PatentIn version 3.2
                                                           Corrected Diskette Needed
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 6
    23 <212> TYPE: PRT
    24 <213> ORGANISM: Artificial sequence
    26 <220> FEATURE:
    27 <223> OTHER INFORMATION: (Hexapeptide
    30 <220> FEATURE:
    31 <221> NAME/KEY: MISC_FEATURE
    32 <222> LOCATION: (1)..(1)
    33 <223> OTHER INFORMATION: Xaa can be Lys, Met, or Arg
    35 <220> FEATURE:
    36 <221> NAME/KEY: MISC_FEATURE
    37 <222> LOCATION: (3)..(3)
    38 <223> OTHER INFORMATION: Xaa can be His, Lys, or Tyr
    40 <220> FEATURE:
    41 <221> NAME/KEY: MISC FEATURE
    42 <222> LOCATION: (4)..(4)
    43 <223> OTHER INFORMATION: Xaa can be His, Lys, or Tyr
    45 <220> FEATURE:
    46 <221> NAME/KEY: MISC_FEATURE
    47 <222> LOCATION: (5)..(5)
    48 <223> OTHER INFORMATION: Xaa can be Lys, Pro, Arg, Val, or Tyr
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/774,147

59 <213> ORGANISM: Artificial sequence

50 <400> SEQUENCE: 1
-> 52 Xaa Lys Xaa Xaa Mat

56 <210> SEQ ID NO: 2 57 <211> LENGTH: 6 58 <212> TYPE: PRT

53 1

DATE: 02/18/2004

```
PATENT APPLICATION: US/10/774,147
                                                            TIME: 15:00:45
                    Input Set : A:\10050-03USA.ST25.txt
                    Output Set: N:\CRF4\02182004\J774147.raw
    61 <220> FEATURE:
    62 <223> OTHER INFORMATION
                                Hexapeptide
    65 <220> FEATURE:
    66 <221> NAME/KEY: misc feature
    67 <222> LOCATION: (4)..(6)
    68 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    70 <400> SEQUENCE: 2
W--> 72 Lys Lys His Xaa Xaa Xaa
    73 1
    76 <210> SEQ ID NO: 3
    77 <211> LENGTH: 6
                                                 Invalid Response
    78 <212> TYPE: PRT
    79 <213> ORGANISM: Artificial sequence
    81 <220> FEATURE:
    82 <223> OTHER INFORMATION
                               Hexapeptide
    85 <220> FEATURE:
    86 <221> NAME/KEY: misc_feature
    87 <222> LOCATION: (4)..(6)
    88 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    90 <400> SEQUENCE: 3
  -> 92 Lys Lys Tyr Xaa Xaa Xaa
    93 1
    96 <210> SEQ ID NO: 4
    97 <211> LENGTH: 6
    98 <212> TYPE: PRT
    99 <213> ORGANISM: Artificial sequence
                                                  Invalid Response
    101 <220> FEATURE:
    102 <223> OTHER INFORMATION: Hexapeptide
    105 <220> FEATURE:
    106 <221> NAME/KEY: misc_feature
    107 <222> LOCATION: (4)..(6)
    108 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    110 <400> SEQUENCE: 4
 -> 112 Arg Lys Tyr Xaa Xaa Xaa
    113 1
    116 <210> SEQ ID NO: 5
    117 <211> LENGTH: 6
    118 <212> TYPE: PRT
                                                Invalid Response
    119 <213> ORGANISM: Artificial sequence
    121 <220> FEATURE:
    122 <223> OTHER INFORMATION: (Hexapeptide
    125 <220> FEATURE:
    126 <221> NAME/KEY: misc_feature
    127 <222> LOCATION: (4)..(6)
    128 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    130 <400> SEQUENCE: 5
--> 132 Met Lys Tyr Xaa Xaa Xaa
    133 1
    136 <210> SEQ ID NO: 6
```

RAW SEQUENCE LISTING

```
PATENT APPLICATION: US/10/774,147

Input Set: A:\10050-03USA.ST25.txt

DATE: 02/18/2004
TIME: 15:00:45
```

Input Set: A:\10050-03USA.ST25.txt
Output Set: N:\CRF4\02182004\J774147.raw

```
137 <211> LENGTH: 6
    138 <212> TYPE: PRT
    139 <213> ORGANISM: Artificial sequence
    141 <220> FEATURE:
    142 <223> OTHER INFORMATION: (Hexapeptide
    145 <220> FEATURE: .
    146 <221> NAME/KEY: misc feature
    147 <222> LOCATION: (1)..(3)
    148 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    150 <400> SEQUENCE: 6 ·
W--> 152 Xaa Xaa Xaa His Lys Met
    153 1
    156 <210> SEQ ID NO: 7
                                                -Invalid Response
    157 <211> LENGTH: 6
    158 <212> TYPE: PRT
    159 <213> ORGANISM: Artificial sequence
    161 <220> FEATURE:
    162 <223> OTHER INFORMATION: (Hexapeptide)
    165 <220> FEATURE:
    166 <221> NAME/KEY: misc_feature
    167 <222> LOCATION: (1)..(3)
    168 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    170 <400> SEQUENCE: 7
₹--> 172 Xaa Xaa Xaa His Val Met
    173 1
    176 <210> SEQ ID NO: 8
    177 <211> LENGTH: 6
    178 <212> TYPE: PRT
                                                Invalled Response
    179 <213> ORGANISM: Artificial sequence
    181 <220> FEATURE: •
    182 <223> OTHER INFORMATION: (Hexapeptide
    185 <220> FEATURE:
    186 <221> NAME/KEY: misc_feature
    187 <222> LOCATION: (1)..(3)
    188 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    190 <400> SEQUENCE: 8
 -> 192 Xaa Xaa Xaa Tyr Lys Met
    193 1
    196 <210> SEQ ID NO: 9
    197 <211> LENGTH: 6
    198 <212> TYPE: PRT
    199 <213> ORGANISM: Artificial sequence
                                                -Invalid Response
    201 <220> FEATURE:
    202 <223> OTHER INFORMATION: Hexapeptide
    205 <220> FEATURE:
    206 <221> NAME/KEY: misc_feature
    207 <222> LOCATION: (1)..(3)
    208 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    210 <400> SEQUENCE: 9
```

RAW SEQUENCE LISTING DATE: 02/18/2004 PATENT APPLICATION: US/10/774,147 TIME: 15:00:45

Input Set : A:\10050-03USA.ST25.txt
Output Set: N:\CRF4\02182004\J774147.raw

```
W--> 212 Xaa Xaa Xaa Tyr Pro Met
    213 1
    216 <210> SEQ ID NO: 10
                                              -Invalid Response
    217 <211> LENGTH: 6
    218 <212> TYPE: PRT
    219 <213> ORGANISM: Artificial sequence
    221 <220> FEATURE:
    222 <223> OTHER INFORMATION: (Hexapeptide
    225 <220> FEATURE:
    226 <221> NAME/KEY: misc_feature
    227 <222> LOCATION: (1)..(3)
    228 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    230 <400> SEQUENCE: 10
 -> 232 Xaa Xaa Xaa Tyr Val Met
    233 1
    236 <210> SEQ ID NO: 11
    237 <211> LENGTH: 6
    238 <212> TYPE: PRT
    239 <213> ORGANISM: Artificial sequence
    241 <220> FEATURE:
    242 <223> OTHER INFORMATION: Hexapeptide
    245 <220> FEATURE:
    246 <221> NAME/KEY: misc_feature
    247 <222> LOCATION: (1)..(3)
    248 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
    250 <400> SEQUENCE: 11
7--> 252 Xaa Xaa Xaa Tyr Tyr Met
    253 1
    256 <210> SEQ ID NO: 12
    257 <211> LENGTH: 6
    258 <212> TYPE: PRT
                                                    -Invalid Response
    259 <213> ORGANISM: Artificial sequence
    261 <220> FEATURE:
    262 <223> OTHER INFORMATION: Mexapeptide
    265 <220> FEATURE:
    266 <221> NAME/KEY: Peptide
    267 <222> LOCATION: (1)..(6)
    268 <223> OTHER INFORMATION: P1
    270 <400> SEQUENCE: 12
    272 Lys Lys His His Lys Met
    273 1
    276 <210> SEQ ID NO: 13
    277 <211> LENGTH: 6
    278 <212> TYPE: PRT
                                              -Invalid Response
    279 <213> ORGANISM: Artificial sequence
    281 <220> FEATURE:
    282 <223> OTHER INFORMATION: Hexapeptide
    285 <220> FEATURE:
    286 <221> NAME/KEY: Peptide
```

RAW SEQUENCE LISTING DATE: 02/18/2004 PATENT APPLICATION: US/10/774,147 TIME: 15:00:45

Input Set : A:\10050-03USA.ST25.txt
Output Set: N:\CRF4\02182004\J774147.raw

```
287 <222> LOCATION: (1)..(6)
288 <223> OTHER INFORMATION: P2
290 <400> SEQUENCE: 13
292 Lys Lys His His Val Met
293 1
296 <210> SEQ ID NO: 14
297 <211> LENGTH: 6
298 <212> TYPE: PRT
                                             -Invalid Response
299 <213> ORGANISM: Artificial sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Hexapeptide
305 <220> FEATURE:
306 <221> NAME/KEY: Peptide
307 <222> LOCATION: (1)..(6)
308 <223> OTHER INFORMATION: Hexapeptide
310 <220> FEATURE:
311 <221> NAME/KEY: Peptide
312 <222> LOCATION: (1)..(6)
313 <223> OTHER INFORMATION: P3
315 <400> SEQUENCE: 14
317 Lys Lys His Tyr Lys Met
318 1
321 <210> SEQ ID NO: 15
322 <211> LENGTH: 6
323 <212> TYPE: PRT
                                                -Invalid Response
324 <213> ORGANISM: Artificial sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION/ Hexapeptide
330 <220> FEATURE:
331 <221> NAME/KEY: Peptide
332 <222> LOCATION: (1)..(6)
333 <223> OTHER INFORMATION: P4
335 <400> SEQUENCE: 15
337 Lys Lys His Tyr Pro Met
338 1
341 <210> SEQ ID NO: 16
342 <211> LENGTH: 6
343 <212> TYPE: PRT
                                                Invalid Response
344 <213> ORGANISM: Artificial sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: /Hexapeptide
350 <220> FEATURE:
351 <221> NAME/KEY: Peptide
352 <222> LOCATION: (1)..(6)
353 <223> OTHER INFORMATION: P5
355 <400> SEQUENCE: 16
357 Lys Lys His Tyr Val Met
358 1.
                                              The type of errors shown exist throughout
361 <210> SEQ ID NO: 17
                                            the Sequence Listing. Please check subsequent
                                                 sequences for similar errors.
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/18/2004 PATENT APPLICATION: US/10/774,147 TIME: 15:00:46

Input Set : A:\10050-03USA.ST25.txt
Output Set: N:\CRF4\02182004\J774147.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,3,4,5 Seq#:2; Xaa Pos. 4,5,6 Seq#:3; Xaa Pos. 4,5,6 Seq#:4; Xaa Pos. 4,5,6 Seq#:5; Xaa Pos. 4,5,6 Seq#:6; Xaa Pos. 1,2,3 Seq#:7; Xaa Pos. 1,2,3 Seq#:9; Xaa Pos. 1,2,3 Seq#:10; Xaa Pos. 1,2,3 Seq#:11; Xaa Pos. 1,2,3

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/774,147

DATE: 02/18/2004 - TIME: 15:00:46

Input Set : A:\10050-03USA.ST25.txt
Output Set: N:\CRF4\02182004\J774147.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0